

Appl. No. 09/644,390
Amdt. dated May 5, 2004
Reply to Office Action of February 23, 2004

IN THE CLAIMS

Claims 1-7 are pending in this application. Please enter new claim 8 as follows.

1. (previously presented) A device for actuating a security device, preferably for securing a motor vehicle against unauthorized use, comprising a control unit having means for transmitting a first coded electromagnetic signal (stimulus signal), a portable transmitter (radio key) having means for receiving the stimulus signal and for transmitting a second coded electromagnetic signal (enable signal), and wherein the control unit is connected to the security device and actuates the latter if the enable signal is received and recognized, wherein both the control unit and the radio key have means for altering carrier frequency of the coded electromagnetic signals and wherein they alter said frequency during signal transmission in a manner known only to the control unit and to the radio key.

2. (previously presented) The device as claimed in claim 1, wherein the radio key has a narrowband transmitter, transmission frequency of which is controllable and wherein the radio key alters its transmission frequency over intervals of time when transmitting signals.

3. (previously presented) The device as claimed in claim 2, wherein said control unit has a tunable narrowband receiver having the same frequency range as the transmitter in the radio key.

4. (previously presented) The device as claimed in claim 1, wherein manner in which the carrier frequency is to be changed is contained in the stimulus signal (1) as a coded information item for transmission to the radio key.

5. (previously presented) The device as claimed in claim 4, wherein the stimulus signal (1) contains a random number and the carrier frequencies are determined by applying a cryptoalgorithm (3) to said stimulus signal (1) and, in this context, particularly to the random number contained in the stimulus signal (1).

6. (previously presented) The device as claimed in claim 4, wherein selection of the carrier frequency at the receiver and transmitter ends is determined, using a coded information item in the stimulus signal, by means of a cryptographic method in the radio key and in the control unit independently of one another.

7. (previously presented) The device as claimed in claim 1, wherein the signal transmission takes place over a spectrum of different carrier frequencies and wherein the enable signal contains a coded information item for modulating said spectrum.

8.(new) The device as claimed in claim 7 wherein the transmission via different carrier frequencies constitutes frequency hopping.